

# Vicksburg National Military Park

National Park Service  
U.S. Department of the Interior

Vicksburg National Military Park



## Great Guns! The Armament of *U.S.S. CAIRO*



### Origins

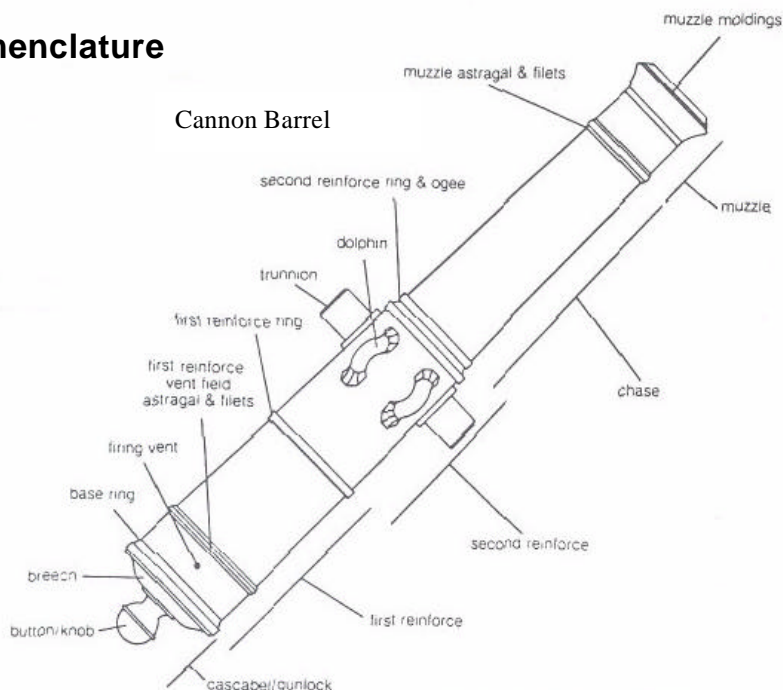
The history of *U.S.S. Cairo*'s armament can be traced to the second half of the 14th century when cannon were first carried aboard ships. These early cannon were most likely short weapons with bell-shaped mouths and probably did not have the benefit of carriages to hold them. The introduction of the gun port in 1501 meant heavier guns could be carried to sea, and in 1513, gunfire sank a ship for the first time. The construction of ships, such as the *Henry Grâce à Dieu* and the *Sovereign of the Seas*, in the 16th and 17th centuries, respectively, signified the influence of cannon on ship design.

### New Era in Naval Warfare

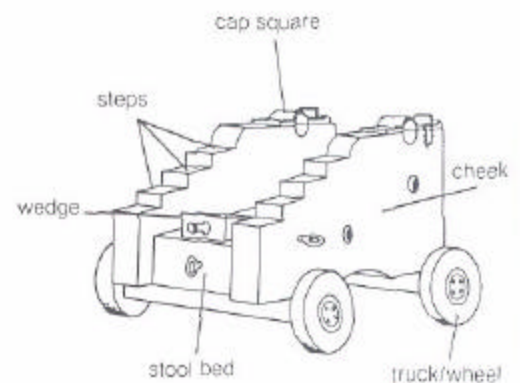
The former vessel, also known as the *Great Harry*, was rebuilt in 1540 as a ship of 1,000 tons with a double tier of gun ports, while the latter vessel became the first three-decker on record carrying 102 guns. Naval warfare entered a new era when Henri-Joseph Paixhans invented the shell gun in 1822.

For the first time, exploding shells could be fired from guns on a horizontal trajectory so that wooden ships were more likely to be sunk by an enemy vessel. Consequently, the ironclad was introduced in the mid-19th century and vessels like the *U.S.S. Cairo* would become the premier fighting machines of the Civil War.

### Nomenclature



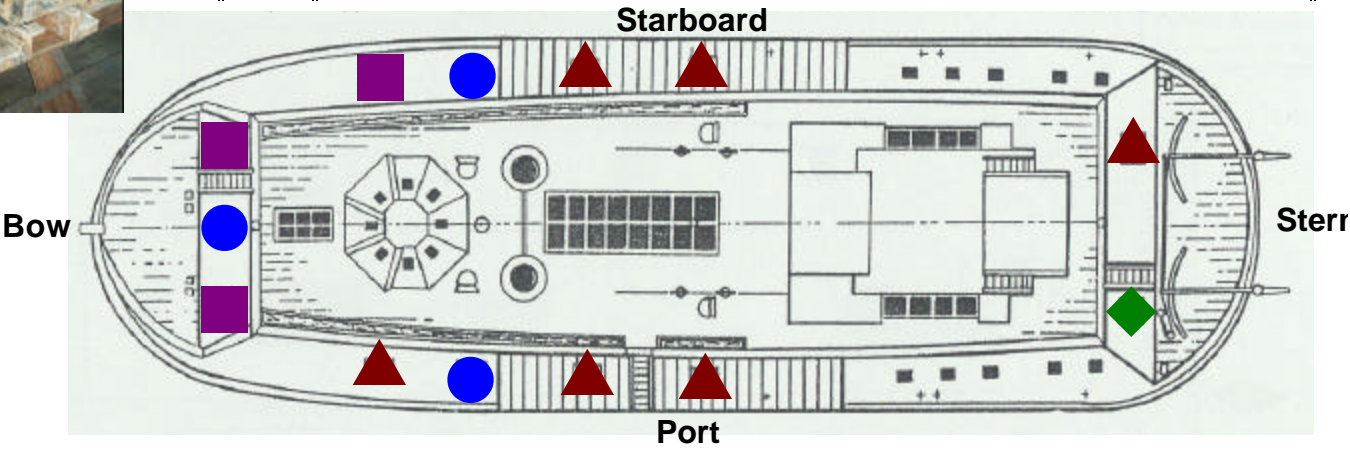
#### Carriage



Statistics and Placement  
of Guns on the USS Cairo



Key	Type Weapon	Model	Bore Diam. (in.)	Bore Length (in.)	Length Overall (in.)	Weight (lbs.)	Qty. on CAIRO
▲	32-pounder Navy Smoothbore 42 cwt <sup>^</sup>	1845	6.4	90.75	106.4	4761	6
●	8-inch Navy Smoothbore 63 cwt <sup>^</sup>	1845	8.0	100.3	119.31	7056	3
■	42-pounder Army Rifle	1841	7.0	110.0	129.0	8465	3
◆	30-pounder Parrott Rifle	1861	4.2	96.8	112.0	3550	1
<sup>^</sup> = A hundred-weight or 112 pounds							



Key	Type Weapon	Projectile	Weight of Projectile (lbs.)	Weight of Charge (lbs.)	Range* (yds. At 5° elev.)	Time of Flight (sec.)	Crew
▲	32-pounder Navy Smoothbore 42 cwt	Shot	32.0	6.0	1756	6.0	10 & Boy
		Shell	26.0	6.0	1710	6.5	
●	8-inch Navy Smoothbore 63 cwt	Shell	51.5	8.0	1770	6.32	14 & Boy
■	42-pounder Army Rifle	Shot	81.25	10.5	1995	--	--
		Shell	64.25	--	--	--	
◆	30-pounder Parrott Rifle	Shell	29.0	3.25	2200	6.87	12 & Boy
* = 1 mile or 1760 yards							

**Sources:**

*Arming The Fleet: U.S. Navy Ordnance in the Muzzle-Loading Era*, Spencer Tucker.

*Artillery and Ammunition of the Civil War*, Warren Ripley.

*Civil War Naval Ordnance*, Eugene B. Canfield.

*Notes on Naval Ordnance of the American Civil War 1861-1865*, Eugene B. Canfield.

*U.S.S. CAIRO Historic Structure Report*, Tom McGrath & Doug Ashley.